

[54] **DEVICE FOR REVOLVING LIQUIDS AND SUPPLYING GAS THERETO**

[75] Inventor: Engelbert Baum, Vienna, Austria

[73] Assignee: Alfa-Laval Stalltechnik GmbH, Wien, Austria

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[56] **References Cited****U.S. PATENT DOCUMENTS**

41,024	12/1863	Smith	261/87 X
1,383,881	7/1921	Thomas	261/87
1,445,935	2/1923	Daman et al.	261/87 X
1,579,355	4/1926	Greenawalt	261/87 X
1,830,985	11/1931	Dreier	416/234 X

2,187,746	1/1940	Lefevre	261/87
3,274,075	9/1966	Kersting	261/87 X
3,400,051	9/1968	Hofschneider	261/87 X
3,584,840	6/1971	Fuchs	210/220 X
3,782,701	1/1974	Hunt	261/87 X
3,975,469	8/1976	Fuchs	261/87

FOREIGN PATENT DOCUMENTS

2439683	3/1975	Fed. Rep. of Germany	416/176
569143	5/1945	United Kingdom	261/87

Primary Examiner—Richard L. Chiesa

Attorney, Agent, or Firm—Cyrus S. Hapgood

[57] **ABSTRACT**

A driven hollow shaft carries propeller means in the form of a screw-shaped vane which at its lower edge widens to a chamber communicating through a channel with the interior of the hollow shaft and having an outlet opening through which gas supplied through the hollow shaft is discharged into a liquid in which the propeller means are immersed. The chamber is formed by two downwardly diverging screw-shaped surfaces of the vane and has a V-shaped cross section with the apex pointing outwardly from the driven shaft.

2 Claims, 3 Drawing Figures